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Routing Slip

TO:	ACTION	COORD	INFO
EO/ICS			16 Nov
D/ICS			
DD/ICS			X
EA-D/ICS			
SA-D/ICS-EP			
CIPC			
LL			
PPS	X		
PBS			X
COMIREX			
SIGINT			
HUMINT			
FIPC			
IHC			
SECOM	STAT		X
CCIS			
SECRETARIAT			
FLC			
AS			
REGISTRY	Completed 11/20		
DDCI			

SUSPENSE: Noon 26 Nov
Date

REMARKS: PPS : please prepare response for DCI signature and coord it w/ TTIC & N10/S&T.

EXECUTIVE SECRETARIAT

ROUTING SLIP

TO:

		ACTION	INFO	DATE	INITIAL
1	DCI		X		
2	DDCI		X		
3	EXDIR		X		
4	D/ICS	X			
5	DDI		X		
6	DDA				
7	DDO				
8	DDS&T		X		
9	Chm/NIC				
10	GC				
11	IG				
12	Compt				
13	D/Pers				
14	D/OLL				
15	D/PAO				
16	SA/IA				
17	AO/DCI				
18	C/IPD/OIS				
19	NIO/S&T		X		
20	C/TTIC		X		
21	SA/IA		X		
22					

SUSPENSE 26 Nov 84
Date

Remarks #4: Please prepare recommendation and coordinated response for DCI signature.

J. H. Rixse
Executive Secretary
14 Nov 84
Date

3637 (10-81)

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DEFENSE INTELLIGENCE AGENCY
WASHINGTON, D.C. 20301

15 NOV 1984

9 NOV 1984

S-2232/OS-1

MEMORANDUM FOR THE DIRECTOR FOR CENTRAL INTELLIGENCE

SUBJECT: Transfer of Sensitive National Security Information to the Soviets (U)

1. (C/NF) The enclosed brochure, advertising the upcoming Space Systems and Technology Conference, was recently brought to my attention as yet another symptom which allows the massive technology hemorrhage of our nation to continue. Billed as the "latest on space plans and programs from those who know," the conference presents an intelligence collection opportunity the Soviets are unlikely to miss.

2. (U) Particularly disconcerting is the number of sensitive topics scheduled for presentation in an unclassified environment. Authoritative representatives of organizations ranging from government contractors to the U.S. Congress will discuss U.S. space programs, systems and technology in this open forum.

3. (S/NF) Current analysis of the Soviet technology acquisition and transfer effort attributes approximately 80 percent of all technology transfer to unclassified, sensitive documentation. Conferences have long been identified as one of the most lucrative mechanisms for obtaining authoritative state-of-the-art documentation in most scientific and technological fields.

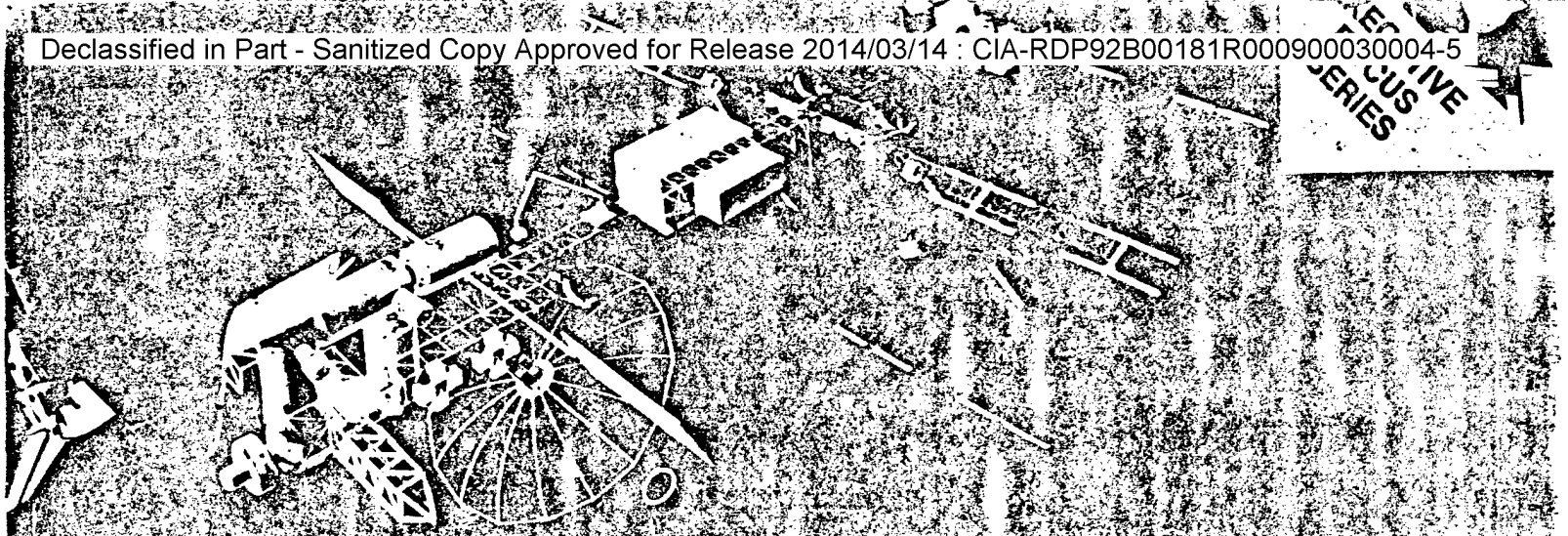
4. (U) I solicit your support in sensitizing our nation's policy makers to the potential compromise of sensitive national security information through the conference mechanism. I am convinced this is a major technology transfer problem area which has languished far too long.

1 Enclosure a/s

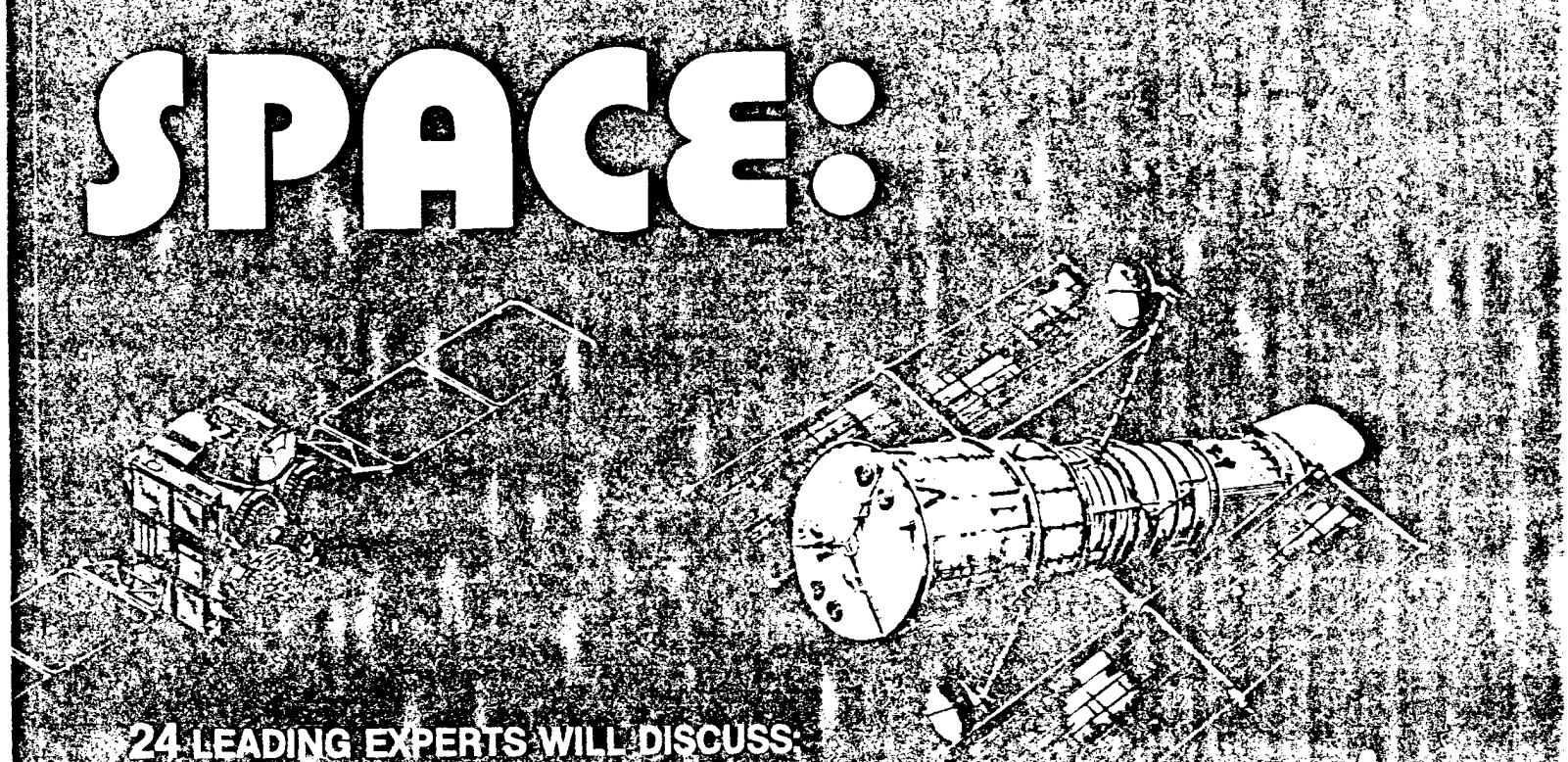
JAMES A. WILLIAMS
Lieutenant General, U. S. Army
Director

Classified by: Multiple Sources
Declassify on: OADR

Not Releasable to Foreign Nationals



SPACE:



24 LEADING EXPERTS WILL DISCUSS:

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SPONSORED BY:

TMSA
THE TECHNICAL MARKETING SOCIETY OF AMERICA

Conference Management by:
TECHNOLOGY TRAINING CORPORATION

WASHINGTON, D.C.
December 3-4, 1984

BOSTON, MA
December 13-14, 1984

THE LATEST ON SPACE PLANS & PROGRAMS FROM THOSE WHO KNOW

"There's no end to the potential of Space." So said the President at a September press conference for the announcement of the Administration's most recent manifestation of its strong committment to all space missions — civilian, commercial and military. In articulating his "National Space Strategy", the President said it would identify selected high-priority efforts and responsibilities and provide implementation plans for major space policy objectives. He called specifically for: a) the NASA and the DoD to identify launch technology for the post-1995 era; b) the formation of a national commission on Space to identify goals and opportunities for the civilian space program — 1985-2005; c) the DoD space program dedication to the Strategic Defense Initiative (SDI); and d) the incentivizing of commercial expendable launch vehicle service.

All of the above, coupled with the prior initiatives of the NASA Space Station program and the DoD Strategic Defense Initiative, add up to one strong thrust for substantial change and growth in space activities. The President also called out for an inclusion of foreign participation in space activities. In order to materialize this, the NASA and the State Department will make every effort to maximize mutually beneficial foreign participation.

Through a careful selection of the right speakers, this conference has been formulated to provide a well-rounded insight into what to expect in the way of new space opportunities over the NEXT TEN YEARS. It will provide the kind of information needed to plan adequately for future developments in Space Systems and Technology.

THE RIGHT SPEAKERS — FROM THE RIGHT PLACES

• MR. DARRELL BRANSCOME	U.S. House of Representatives
• MR. JOHN W. BURGE	Logicon, Inc.
• MR. RICHARD F. CARLISLE	NASA HQ, OSS
• MR. MICHAEL J. CUVIELLO	NASA HQ, OAST
• MR. L.J. "BUD" EVANS, JR.	NASA Headquarters
• MR. JOEL S. GREENBERG	Princeton Synergetics, Inc.
• COL. CHARLES E. HEIMACH	Headquarters, USAF Space Command
• MR. DOUGLAS A. HEYDON	Arianespace, Inc.
• MR. NICHOLAS L. JOHNSON	Teledyne Brown Engineering
• DR. LOUIS C. MARQUET	DARPA
• MR. ERNESTO R. MARTIN	Satellite Television Corporation
• DR. DONALD B. MILLER	NOAA
• DR. CHRISTINE A. MONTGOMERY	Logicon, Inc.
• LT. COL. VINCENT L. RAUSCH	Wright Aeronautical Laboratories
• MR. DONALD G. REA	Jet Propulsion Laboratories
• MR. JAMES M. ROMERO	NASA HQ, OAST
• MR. LAWRENCE J. ROSS	NASA Lewis Research Center
• COL. GILBERT D. RYE (USAF)	National Security Council
• MS. MARCIA SMITH	Library of Congress
• MR. EARL WAHLQUIST	Department of Energy
• MISS JUDITH WATSON	NASA Langley Research Center
• MR. RAY A. WILLIAMSON	Cong. Office of Technology Assessment
• MR. TAKASHI YAMADA	NASDA of Japan
• MR. CHARLES A. YAMARONE	Jet Propulsion Laboratories

PROGRAM — FIRST DAY
(Registration 7:00 A.M. — Program Starts 8:00 A.M.)

MR. NICHOLAS L. JOHNSON, (Moderator), Principal Technologist, Teledyne Brown Engineering

NEW NATIONAL SPACE STRATEGY — ADMINISTRATION PLANS — CONGRESSIONAL REACTIONS

NATIONAL SPACE STRATEGY — POLICY AND PRIORITIES

***COLONEL GILBERT D. RYE (USAF),** Director of Space Programs, National Security Council*

• The President's New Vision • The Space Transportation System (STS) • Civil Space Program • Commercial Space Program • National Security Space Program • Future Directions

MILITARY SPACE ACTIVITIES — A CONGRESSIONAL PERSPECTIVE

***MS. MARCIA S. SMITH,** Specialist in Aerospace Systems, Science Policy Research Division, Congressional Research Service, Library of Congress*

• Origin of the Civilian/Military Space Program Split • DoD Organization for Space Activities • Current U.S. Military Space Systems • Future Proposals • History of U.S. ASAT Programs • Congressional Debate Over the Need for U.S. ASAT • Congressional Reaction to the Strategic Defense Initiative

A CONGRESSIONAL VIEW ON THE NASA CIVIL/COMMERCIAL SPACE PROGRAM

***MR. DARRELL BRANSCOME,** Staff Director, Subcommittee on Space Science and Applications, Committee on Science and Technology, U.S. House of Representatives*

• National Space Policy • Evolution of Our Space Program • Major Trends • National Commission on Space • Space Commercialization Proposals/Legislation • Space Commercialization Policy Issues • Space Station • Future Outlook

SPACE STATION PROGRAM EVOLUTION & TECHNOLOGY DEVELOPMENTS

AN OVERVIEW OF CURRENT SPACE STATION ACTIVITIES

***MR. RICHARD F. CARLISLE,** Deputy Director, Engineering, Office of Space Station, NASA Headquarters*

• Initial Definition • Evolutionary Design Strategies • Extended Life Through Maintenance • Space Station Systems Engineering • Mutually Beneficial Foreign Participation • Outlook for the Future

SPACE STATION TECHNOLOGY — PLANNING FOR EVOLUTIONARY GROWTH

***MR. JAMES M. ROMERO,** Assistant Director for Space (Space Station Technology), Office of Aeronautics and Space Technology, NASA Headquarters*

• Energy Conversion and Power Management • Thermal Management — Life Support — Automation • Attitude Control and Stabilization — EVA • Future Technology Development Needs — Industry's Opportunities

INTERNATIONAL COLLABORATION & FOREIGN SPACE PROGRAMS

AN OVERVIEW OF INTERNATIONAL COOPERATION AND COMPETITION IN CIVILIAN SPACE ACTIVITIES

***MR. RAY A. WILLIAMSON,** Project Director, International Cooperation and Competition in Space, Congressional Office of Technology Assessment*

• Civilian Space Policy • International Competition • International Cooperation • International Issues in: Space Transportation, Satellite Remote Sensing, Satellite Communications, Material Processing, Space Science • Space Technology and U.S. Foreign Policy • Commercialization

ARIANE SPACE TRANSPORTATION SYSTEM PROGRAMS AND FUTURE PLANS

***MR. DOUGLAS A. HEYDON,** Executive Vice President and General Manager, Arianespace, Inc.*

• Proven Capability of ARIANE Vehicles • Current Status of ARIANE STS • Future Plans • Arianespace and "Privatization" of Government Development • International Competition and Cooperation • Arianespace Perspective of Future World-Wide Launch Needs

JAPAN'S NATIONAL SPACE PROGRAM: CURRENT PROGRAMS AND NEW DIRECTIONS

***MR. TAKASHI YAMADA,** Director, Washington D.C. Office, National Space Development Agency of Japan (NASDA)*

• Outline of Japanese Space Activities • New Japanese Government Policy • Structure of Space Related Organizations • Annual Budget for Space Activities • New Satellite Programs: Communications, Meteoralogical, Broadcasting, Earth Observation • Launch Vehicle Development • Future Launch Schedule • International Cooperation — Japanese Perspective

THE SOVIET SPACE PROGRAM — CURRENT PLANS AND PROGRAMS — FUTURE DIRECTIONS

***MR. NICHOLAS L. JOHNSON,** Principal Technologist, Teledyne Brown Engineering*

• Emphasis of Soviet Space Programs • Recent Advances in Military Surveillance Satellites • Anti-Satellite Systems and Politics • Trends of the Man-in-Space Program • New Launch Vehicle Systems • Modernization of Support Satellites • Expansion of Geostationary Resources • Scientific Investigations and Solar System Exploration

SPACE TRANSPORTATION & LAUNCH VEHICLE UPDATE

NEXT GENERATION ORBITAL TRANSFER VEHICLE (OTV): TECHNOLOGY DEVELOPMENT TO FINAL INTEGRATION IN THE NINETIES

***MR. MICHAEL J. CUVIELLO,** Assistant Director of Space (Transportation Systems), Office of Aeronautics and Space Technology, NASA Headquarters*

• Space Based OTV Mission Scenarios and Requirements • OTV System Concepts, Trades and Issues • Advanced OTV Technology Requirements • Future Plans

A HIGH ENERGY STAGE FOR THE NATIONAL SPACE TRANSPORTATION SYSTEM

***MR. LAWRENCE J. ROSS,** Director, Space Flight Systems Directorate, NASA Lewis Research Center*

• Centaur Program History • Shuttle/Centaur Program Beginnings • Vehicle Configuration • Performance Expectations • Planned Usage • Developmental Scope • Management Structure • Program Status • Future Possibilities

TRANS-ATMOSPHERIC VEHICLES — AIRCRAFT SYSTEM OF THE FUTURE

***LT. COLONEL VINCENT L. RAUSCH,** Project Director, TAV, Deputy for Development Planning, Aeronautical Systems Division, Wright Aeronautical Laboratories*

• Program Background and Objective • Roles and Missions • Technologies, Materials, Structures and Propulsion • Supportability • Role of Man • Future Directions

PROGRAM — SECOND DAY
(Program Resumes 8:00 A.M. — Adjourns 5:00 P.M.)

NEW DIRECTIONS IN MILITARY SPACE PLANS & PROGRAMS

SPACE COMMAND'S VIEW OF THE FUTURE

***COLONEL CHARLES HEIMACH (USAF),** Director Space Plans, Headquarters, Space Command*

• Space Command Architecture • Sensor, Space System and C^3 Requirements • New Capabilities, Survivability Considerations • Areas Critical to Implementing U.S. Military Space Operations in the 1990's and Beyond

TRENDS IN DIRECTED ENERGY TECHNOLOGY FOR POTENTIAL SPACE APPLICATIONS

***DR. LOUIS C. MARQUET,** Director, Directed Energy Office, Defense Advanced Research Projects Agency (DARPA)*

• Large, Light-Weight Optics • Sources of Directed Energy • Atmospheric Compensation • Precision Pointing and Tracking

A KNOWLEDGE-BASED SYSTEM FOR SPACE THREAT WARNING

***DR. CHRISTINE A. MONTGOMERY,** Chief Scientist (D.C. Session), and **MR. JOHN W. BURGE,** Staff Scientist (Boston Session), Operating Systems Division, Logicon, Inc.*

• Improving Space Event Prediction With an Active Knowledge-Based System • Predicting Space Events Using Knowledge of Plans • Representing Knowledge About Space Events • Translating User Knowledge Into System Goals • Handling Imprecise and Uncertain Information • Understanding Natural Language Message Inputs About Space Events • Components of a Knowledge-Based System for Space Threat Warning

SPACE COMMERCIALIZATION POLICY & INITIATIVES

COMMERCIAL USE OF SPACE — NASA POLICY AND NATIONAL INITIATIVES

MR. L.J. "BUD" EVANS, JR, *Deputy Assistant Administrator, Commercial Programs, NASA Headquarters*

• Overview of Two Parallel Efforts — National and NASA • The National Commercial Space Initiative — National Commercial Space Policy — Congressional Pronouncements • The NASA Commercialization Task Force — Program Initiatives — Implementation Plans • The NASA Office of Commercial Programs — Goals and Objectives

GOVERNMENT SUPPORT OF COMMERCIAL SPACE VENTURES — SOME LESSONS LEARNED

MR. JOEL S. GREENBERG, *President, Princeton Synergetics, Inc.*

• Overview of Government Tools for Influencing Private Sector Investments — Joint Endeavor Agreements, Subsidization, Tax Incentives, etc • Effects of Government Actions — Shifting of Burden of Funding, Risk Reduction • Examples of Current Commercialization Endeavors — Leasecraft, Landsat • Future Prospects

NEW SPACE PROGRAMS & TECHNOLOGY DEVELOPMENTS

CONCEPTUAL APPROACHES TO ON-ORBIT CONSTRUCTION OF LARGE SPACE STRUCTURES

MISS JUDITH J. WATSON, *Aerospace Engineer, Structural Concepts Branch, Structures and Dynamics Division, NASA Langley Research Center*

• Large Space Structure Construction Background • Hardware and Packaging • EVA Working Conditions • Testing in Simulated Zero-G Environment • Astronaut Manual Construction • Manned Mobile Work Station Assembly Concepts • Assembly Rates • Shuttle Flight Experiment for EVA Structural Assembly • Space Station

THE TOPEX PROJECT — NEXT GENERATION OCEAN MONITORING

MR. CHARLES A. YAMARONE, *Manager, TOPEX Development Flight Project, Jet Propulsion Laboratory*

• Observing the Oceans From Space • Satellite Altimetry • TOPEX Approach • U.S./French Collaboration Mission • Satellite, Sensors, Ground Systems • TOPEX and Other Programs • Near-Term Prospects

THE DoD SPACE NUCLEAR POWER TECHNOLOGY PROGRAM — REQUIREMENTS AND APPLICATIONS

MR. EARL WAHLQUIST, *Deputy Program Director for Nuclear Technology, Office of Nuclear Energy, Department of Energy*

• SP100 Space Reactor Program • Multi-Megawatt Space Power Systems • Space Nuclear Reactor Safety Design Considerations • Future Applications

SPACE SCIENCE & APPLICATIONS — FUTURE U.S. METEOROLOGICAL SATELLITE SYSTEMS

DR. DONALD B. MILLER, *Chief, Advanced Systems Concepts Group, National Environmental Satellite, Data, and Information Service, NOAA*

• Current NOAA Operational Systems • Products and Services • Use By Environmental Services • Improvements Underway • Dependance on Commercial Technology Sources • Needed Technology Developments • ELV's, Shuttles, and Space Stations • Competing Possibilities for Systems of the 1990's

ASSESSING GLOBAL HABITABILITY THROUGH REMOTE EARTH SENSING

MR. DONALD G. REA, *Assistant Laboratory Director, Technology and Space Program Development, Jet Propulsion Laboratory*

• Global Habitability — New NASA Initiatives • Objectives of Global Habitability • Use of Synthetic Aperture Radar • Next Generation Imaging Spectrometer • Scatterometer • Future Outlook

U.S. DIRECT BROADCAST SATELLITE SERVICE: STATUS, PERSPECTIVES AND OUTLOOK

MR. ERNESTO R. MARTIN, *Assistant Vice President, Engineering, Satellite Television Corp.*

• Who Are the Players? • What Will They Offer? • Who Are the Customers? • What Features — Stereo, Teletext, Software Downloading? • How Small and Inexpensive Will the Terminals Be? • What Is the Future?